

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A fuel cell system comprising:
  - a fuel cell to be supplied with a gas for power generation, the gas unused for the power generation to be discharged out of the fuel cell;
  - a circulation flow path through which the gas discharged out of the fuel cell is resupplied to the fuel cell;
  - a variable flow rate circulation pump for circulating the gas through the circulation flow path, which is operative to adjust a flow rate of the gas in the circulation flow path;
  - a valve for discharging the gas in the circulation flow path to the outside of the circulation flow path;
  - a voltage sensor for measuring voltage of the fuel cell; and
  - a controller for controlling the circulation pump and the valve,wherein ~~the circulation pump and the valve are controlled based on the voltage measured by the voltage sensor~~ the controller is configured to determine whether to increase the flow rate of the gas in the circulation flow path or to open the valve based on the voltage measured by the voltage sensor.
2. (Previously presented) The fuel cell system of claim 1, wherein
  - the fuel cell comprises a plurality of cells stacked on one another, and the voltage sensor measures voltages of the respective cells, and wherein
  - if some of the measured voltages of the respective cells are within a predetermined range which includes an average value of the voltages of the respective cells, the circulation pump is controlled to reduce a flow rate of the gas circulated, and the valve is controlled to increase an amount of gas to be discharged, as the average value of the voltages of the respective cells becomes lower.

3. (Previously presented) The fuel cell system of claim 1, wherein  
the fuel cell comprises a plurality of cells stacked on one another, and the voltage  
sensor measures voltages of the respective cells, and wherein  
the circulation pump is controlled to reduce a flow rate of the gas circulated, and the  
valve is controlled to increase an amount of gas to be discharged, as a variation in the  
measured voltages between the cells becomes smaller.
4. (Previously presented) The fuel cell system of claim 1, wherein  
the fuel cell comprises a plurality of cells stacked on one another, and the voltage  
sensor measures voltages of the respective cells, and wherein  
the fuel cell system further comprises a clogging detector which monitors the voltages  
of the respective cells and determines possibility of clogging of a gas passage in the fuel cell  
based on the monitored voltages of the respective cells,  
wherein the circulation pump is controlled to reduce a flow rate of the gas circulated,  
and the valve is controlled to increase an amount of gas to be discharged, as the possibility of  
the clogging is determined to be low.
5. (Previously presented) The fuel cell system of claim 4, wherein  
if some of the monitored voltages of the respective cells are within a predetermined  
range which includes an average value of the voltages of the respective cells, the possibility  
of clogging is determined to be lower, as the average value of the voltages of the respective  
cells becomes lower.
6. (Previously presented) The fuel cell system of claim 4, wherein  
the possibility of clogging is determined to be lower, as a variation in the measured  
voltages between the cells becomes smaller.

7. (Previously presented) The fuel cell system of claim 1, wherein the valve is controlled to increase an amount of gas to be discharged, if a rate of increase in the measured voltage is kept below a predetermined rate while the circulation pump is being controlled to increase a flow rate of the gas circulated more than that in a normal operation.

8. (Currently amended) A method for improving fuel gas consumption in power generation of fuel cells, wherein the fuel gas unused for the power generation is resupplied to the fuel cells through a fuel gas circulation system which includes a variable flow rate circulation pump operative to adjust a flow rate of the fuel gas circulating through the fuel gas circulation system and a valve for discharging the fuel gas in the fuel gas circulation system to the outside thereof, the method comprising:

monitoring output voltages of the respective fuel cells;

determining whether to increase the flow rate of the fuel gas in the fuel gas circulation system or to open the valve based on the monitored output voltages;

controlling the variable flow rate circulation pump to increase flow rate of the fuel gas in the fuel gas circulation system, if some of the monitored output voltages are out of a predetermined range which includes an average value of the output voltages of the respective fuel cells; and

opening the valve to discharge ~~discharging~~ the fuel gas out of the fuel gas circulation system, if some of the monitored output voltages are within the predetermined range and the average value of the output voltages of the respective fuel cells is lower than a predetermined value.

9. (New) The fuel cell system of claim 1, wherein the fuel cell comprises a plurality of cells stacked on one another, and the voltage sensor measures voltages of the respective cells, and wherein the controller is configured to control the circulation pump to increase the flow rate of the gas in the circulation flow path if some of the measured voltages are below a predetermined range which includes an average value of the measured voltages of the respective cells, and to open the valve if some of the measured voltages are within the

predetermined range and the average value of the voltages of the respective cells is lower than a predetermined value.

10. (New) The fuel cell system of claim 1, wherein  
the controller is configured to control the circulation pump to decrease the flow rate of the gas in the circulation flow path when the valve is being opened.

11. (New) A fuel cell system comprising:  
a fuel cell to be supplied with a gas for power generation, the gas unused for the power generation to be discharged out of the fuel cell;  
a circulation flow path through which the gas discharged out of the fuel cell is resupplied to the fuel cell;  
a variable flow rate circulation pump for circulating the gas through the circulation flow path, which is operative to adjust a flow rate of the gas in the circulation flow path;  
a valve for discharging the gas in the circulation flow path to the outside of the circulation flow path;  
a voltage sensor for measuring voltage of the fuel cell; and  
a controller for controlling the circulation pump and the valve,  
wherein the controller is configured to control the circulation pump to increase the flow rate of the gas in the circulation flow path if the voltage measured by the voltage sensor becomes lower than a predetermined value, and to open the valve thereafter if the voltage measured by the voltage sensor does not recover to the predetermined value.